OIPE JC14 MAR 0 1 2004 PATENT & TRADEMARK OFFICE

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Venkata Giri Venkataramanan	Date:	February 26, 2004
Serial No.:	10/682,368	Docket No.:	032026:0637
Filed:	October 9, 2003	Group Art Unit:	2838

Title: THREE-PHASE ISOLATED VECTOR SWITCHING AC TO AC FREQUENCY CONVERTERS

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MAIL STOP MISSING PARTS, Commissioner for Patents, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on February 26, 2004.

Harry C. Engstrom
(Name of applicant, assignee or Registered Representative)

(Signature)

February 26, 2004
(Date of Signature)

INFORMATION DISCLOSURE STATEMENT

MAIL STOP MISSING PARTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

With respect to the examination of the above-referenced application, applicant cites the following documents, copies of which are enclosed. These documents are also listed on an accompanying Form PTO-1449.

UNITED STATES PATENT

Inventors	Patent No.	Issue Date
Venturini, et al.	4,628,425	December 9, 1986

OTHER DOCUMENTS

M. Venturini, A. Alesina, "The Generalized Transformer: A New Bidirectional Sinusoidal Waveform Frequency Converter with Continuously Adjustable Input Power Factor," IEEE Power Electronics Specialists Conference Record 1980, Atlanta, GA, June, 1980, pp. 242-252.

A. Alesina, M. Venturini, "Intrinsic Amplitude Limits and Optimum Design of Nine-Switches Direct PWM AC-AC Converters," IEEE Power Electronics Specialists Conference Record 1988, Kyoto, Japan, April, 1988, pp. 1284-1291.

L. Wei, et al., "Matrix Converter Topologies with Reduced Number of Switches," Proceedings of IEEE Power Electronics Specialists Conference, PESC '02, June 23-27, 2002, pp. 57-63.

REMARKS

The foregoing documents relate to frequency converters, matrix converters and to bidirectional sinusoidal waveform frequency converters. The attention of the examiner is also directed to the prior art circuits shown in Figs. 1-6 and discussed in the Background of the Invention section on pages 1-2 of the present application.

It is thus requested that the foregoing documents be considered during examination of the above-referenced application and be specifically made of record therein.

Respectfully Submitted,

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Form PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 032026-0637	SERIAL NO. 10/682,368
		APPLICANT Venkata Giri Venkataramanan	
Dated Submitted: February 26, 2004 (Use several sheets if necessary)		FILING DATE 10/09/2003	GROUP ART UNIT 2838

MAR 0 1 2004 PATENT & TRADEMARK OFFICE

INFORMATION DISCLOSURE CITATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
		4,628,425	12/9/86	Venturini, et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

		M. Venturini, A. Alesina, "The Generalized Transformer: A New Bidirectional Sinusoidal Waveform Frequency Converter with Continuously Adjustable Input Power Factor," IEEE Power Electronics Specialists Conference Record 1980, Atlanta, GA, June, 1980, pp. 242-252.
		A. Alesina, M. Venturini, "Intrinsic Amplitude Limits and Optimum Design of Nine-Switches Direct PWM AC-AC Converters," IEEE Power Electronics Specialists Conference Record 1988, Kyoto, Japan, April, 1988, pp. 1284-1291.
		L. Wei, et al., "Matrix Converter Topologies with Reduced Number of Switches," Proceedings of IEEE Power Electronics Specialists Conference, PESC '02, June 23-27, 2002, pp. 57-63.

EXAMINER	DATE CONSIDERED

* **EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.**